AN EXAMINATION OF DIFFERENT MEASURES OF WORK EXPERIENCE, AND THE RELATIONSHIP BETWEEN PREVIOUS EXPERIENCE AND SAFETY

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by Rachel Shackleton

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Abstract

An individual's previous work experience may be an important factor in relation to safety behaviour. It is not uncommon to find work experience used as a criterion in a job advertisement, a hurdle during the selection process, and/or used as a gauge of a new employee's training or induction requirements. The aim of this study was to examine six different measures of work experience, and the relationship between previous experience and safety. Six different measures of work experience were assessed on their ability to predict similarity between past job experience and future requirements of a job. The results showed that measuring work experience by identifying the total number of organisations and work groups or teams a target job has been performed in are good predictors of similarity between past job experience and future requirements of a job. The results also showed that participants who did not report an accident in their current job had larger similarity ratings between past and present experience in comparison to participants who did report an accident in their current job. The results are discussed in terms of safety and the practical implications for organisations measuring work experience during the hiring process.

Introduction

Health and safety in the workplace is of major concern worldwide. The International Labour Organisation reported in 2015 that an employee dies from a job-related accident or disease every 15 seconds (Safety & Health at Work, 2015). New Zealand has a particularly bad reputation in regards to workplace safety, with New Zealand's overall work-related fatality rate per 100,000 workers being more than 50 percent higher than that of Australia's and nearly 70 percent higher than that of the United States (Gunby, 2011). According to The State of Workplace Health and Safety in New Zealand 2012 report, during the period 2008 to 2010 there were 102 job-related fatalities, and 378 job-related critical non-fatal injuries. The report predicted the annual total social and economic cost of job-related injuries and disease to be $3.5 billion. However, this is only a snapshot of the total cost to New Zealand. The full cost of injuries to society, organisations and individuals is likely to be a lot more (The State of Health and Safety in New Zealand, 2012). It is clear from this brief discussion that research which helps reduce accidents should be a priority.

An individual's previous work experience may be an important factor in relation to their safety behaviour. It is not uncommon to find work experience used as a criterion in a job advertisement, used as a hurdle during the selection process, and/or used as a gauge of a new employee's training or induction requirements. However, each of these human resource practices requires a clear understanding of how work experience should be defined, and in particular how work experience should be measured. As such, the focus of this dissertation is to examine how the construct of work experience should be defined and measured, as well as the nature of the relationship between previous work experience and safety.

The next section presents an overview of accident causation theories, with a particular focus on where employee work experience fits into the causal process. This is followed by a more in-depth discussion of the work experience construct and how it might be measured.

Following this, the limitations of several measures of work experience are discussed with a particular focus on the implications for organisations measuring work experience during the hiring process. Three measures of work experience which are predicted to be good indicators of experience are then proposed. Finally, a model is presented which proposes two ways in which previous work experience may relate to safety. The focus in that section is how similarity between past and present experience may facilitate safety.

Accident Causation Theories

Given the significant cost of workplace injuries and disease, it is not surprising that there are a number of studies, which have been designed to investigate the primary causes of accidents, as well as the best safety management interventions to ensure safety (see Lehto & Salvendy, 1991, for a review). The majority of studies designed to investigate possible safety management interventions can be categorised into one of three approaches: (a) an ergonomic approach, (b) an environmental approach, or (c) a behavioural approach (Gyekye, Salminen, & Ojajarvi, 2012).

The ergonomic approach to safety focuses on recognising features of the job that are especially risky and then redesigning them to be safer. The ergonomic approach puts an emphasis on the match between equipment design and the work environment, where the goal is to fit the job to the worker as opposed to matching the worker to the job. For example, in order to eliminate the occurrence of nurses self-injecting themselves, the syringe was redesigned so that after the injection the needle is instantly retracted into the barrel. As a result, the product (i.e., syringe) is now a better match for the worker (Owen, 2000). The environmental approach puts an emphasis on possible hazards (e.g., chemicals, viruses, pressure extremes) in the workplace, and on ways in which they can be reduced. Many jobs have identified safety risks and hazards that cannot be easily removed. However, despite not being easily removed, if these risks are unchanging or fixed, they can be protected against

and/or suitable cautions set up (Reason, 1990). For example, one hazard that simply cannot be avoided in underground mining is ground instability. However, one way in which a mining organisation can protect its miners is by providing the required protective equipment and ensuring it is used and maintained.

The last approach to safety, and the one that is relevant to this dissertation, is defined as the behavioural approach. The behavioural approach asserts that the majority of accidents may be traced to employees' unsafe acts in the workplace (Burk & Smith, 1990; DeJoy, 1990; Garavan & O'Brien, 2001; Norman, 1981; Reason, 1990). That is, an accident is caused when an employee engages in an unsafe act in what is essentially a risk free (or risk controlled) environment (e.g., they decide not to use appropriate protective equipment). In an attempt to understand the unsafe acts that play a part in accidents, Norman (1981) categorised unsafe acts into two types of cognitive failures. The first type is defined as an unintended error and occurs when someone fails to perform a task as expected by the organisation, supervisor and co-workers. The second type is defined as a mistake and is where flawed thinking results in erroneous, but planned actions. However, it is also possible that unsafe acts in work environments originate not only from cognitive failures (Norman, 1981), but also from conscious failure to follow a specific rule or policy which is known to the employee (Farrington-Darby, Pickup, & Wilson, 2005). Reason (1990) defined these unsafe behaviours as a safety violation.

Regardless of whether the unsafe act is an unintended error, a mistake or a violation, the unsafe behaviour can be reduced through human resource practices. For example, organisations can attempt to control employee engagement in unsafe acts through processes such as appropriate selection methods, employee training, and supervision (Keyserling, 1983). One factor in particular which has some potential to help ensure employees do not engage in unsafe acts is a focus on the individual's experience. For example, it can be argued

that previous experience should ensure the person has the knowledge to avoid unintended errors, to reduce the occurrence of mistakes, and to realise the potential negative consequences of safety violations. As such, a large number of studies on workplace accidents and safety management have drawn attention to the growing significance of an employee's degree of job experience as a factor contributing to their engagement in (or avoidance of) unsafe acts (Butani, 1988; Fabiano, Currò, Reverberi, & Pastorino, 2008; Gyekye & Salminen, 2010; Keyserling, 1983; Leigh, 1986; Li et al., 2003; Paul & Maiti, 2007; Root & Hoefer, 1979). Given the potential of previous experience to improve safety performance, it is vital that the construct of work experience is clearly understood, and that is the focus of the next section.

The Construct of Work Experience

While it seems obvious that work experience can play a part in ensuring employee safety, surprisingly little research has been devoted to precisely defining the work experience construct (see Quińones, Ford, & Teachout, 1995; Tesluk & Jacobs, 1998 as notable exceptions), or considering the implications of different measurement options (see Burt, 2015 as a notable exception). Burt (2015) believes that this may be because the phrase or label work experience appears easy to understand. However, work experience is in fact a very multifaceted and dynamic construct; and it is imperative to fully comprehend what is meant by work experience (Burt, 2015; Quińones, et al., 1995; Tesluk & Jacobs, 1998). As such, this section provides an in-depth discussion of the work experience construct.

In an attempt to define and understand work experience, Burt (2015) suggests differentiating between being experienced, and experiencing something. This difference draws attention to frequency of interaction with something (e.g., a task, process, etc.) as being a crucial feature of work experience. For example, on a single occasion an employee can experience how a certain piece of machinery is operated or how a work group functions while

performing a specific task. However, an employee cannot become an experienced operator of the machinery, nor experienced in the work groups functioning qualities during this single occasion. Even if a 'one off' experience from the past is identical or similar to that which is now required in a new job, the employee is not experienced.

A further key aspect of work experience is *similarity* between the past and the present. That is, to be considered experienced, a new employee will have a history of engaging in the specific task or job (e.g., have repeatedly performed the task), and there will also be a considerable degree of similarity between past work and what is required in a new job. Similarity is described as the correspondence between the characteristics of the new job and the variability of experience from prior employment (Pinder & Schroeder, 1987). Furthermore, the more similarity between the past and the present, the more likely the previous experience will translate to the new job. For example, a truck driver applying for a new job may specify in the work history section of their CV that they have five years of cumulative job tenure as a truck driver. However, the important questions to ask are: is the work environment of the new job similar to work environments worked in in the past? And are the work tasks of the new job similar to the work tasks performed in the past? If an individual answers 'no' to both these questions, it would be incorrect to categorise the individual as an experienced truck driver in regards to the new job.

A factor which will enhance the probability of similarity between the past and the present is *variability* in past activities. That is, the more varied an individual's past work, the more likely some of those aspects of it will be similar to aspects of a new job. Consider again the example of the truck driver. An individual might have driven a truck between two cities on a highway for five years, each day following the same route, delivering the same goods, to the same clients. In this example, variability is low and if the truck driver was hired to drive a dump truck in an opencast mine, very little of their past work experience might have

similarity to the aspects of the new job: the terrain would be completely different, the equipment different, the load characteristics different. On the other hand, had the truck driver acquired more variability in his previous five years' experience, the likelihood of having experience in the work environment and work tasks of the new job would increase. Thus, variability increases the probability of similarity, and as such both aspects of work experience need to be considered.

Measuring the Different Facets of Work Experience

Having considered the attributes which define work experience, namely frequency, similarity and variability, it becomes increasing apparent that there are several facets to the work experience construct. There are two noteworthy papers in the work experience literature which provide conceptual frameworks that bring together the different facets of work experience (Quińones et al., 1995; Tesluk & Jacobs, 1998). Despite appearing somewhat complex in nature, essentially what both these studies provide is a model for measuring the different aspects of work experience.

Quińones et al. (1995) first categorized the different measures of work experience into two dimensions: measurement mode (amount, time, and type) and level of specificity (task, job, and organisation). Time-based measures of work experience consist of conventional measures such as job or organisational tenure (e.g., the number of months or years in a job or organisation). Amount measures include measures such as the number of times a task is performed or the number of organisations a person has worked for. Lastly, type measures are defined as measures of experience which classify work experience qualitatively (e.g., has worked as a doctor, has worked in administration, etc.). According to Quińones et al. (1995), each of these three measurement modes can also be measured at three levels of specificity (task, job, and organisation), giving a framework of a 3 x 3 matrix, forming nine distinct cells which depict a range of measures of work experience.

As the framework proposes, employees can differ in their level of experience carrying out certain jobs. For example, they can vary in the number of jobs they have held within an organisation (amount). Or, they can vary in the duration of time employed in a specific job (time). Finally, individuals can also vary in the degree of job complexity (type). Some individuals may have been involved in a very challenging and difficult job, while others may have been involved in a more routine and simple job. It is crucial to understand that each measure of job level experience encapsulates to some extent a distinctive segment of an employee's overall level of work experience. For example, two individuals may have held their jobs within an organisation for the same amount of time but vary in the complexity of the job performed. Correspondingly, individuals may have held the same number of jobs within an organisation but vary in the amount of time they have been employed with an organisation.

It is also possible to measure an individual's work experience at the task level of specificity. For example, an employee can vary in the number of times they have carried out a task (amount), the duration of time applied to carrying out a certain task (time), or the type of task they performed (type). Equally, individuals can vary in experience at the organisational level of specificity. That is, individuals can vary in the type of organisation they have been employed with (forestry, administration, etc.) (type), the number of organisations they have been employed with (amount), and the time spent with a given organisation (time).

Tesluk and Jacobs (1998) built on the model proposed by Quińones et al. (1995) in a number of ways. First, the authors discussed how quantitative and qualitative features of work experience can interact over time. According to the authors, quantitative aspects of work experience include two of the three measurement modes put forward by Quińones et al. (1995): time and amount. On the other hand, qualitative aspects of work experience can be explained by many dimensions; for example, the terrain or environment of a task or job, the

complexity of a task or job, or the opportunities for training. The authors also added two additional measurement modes to the model: density and timing. According to the authors, density measures refer to the intensity of the experience, while timing measures relate to when a work event occurs.

The different measurement modes, specificity levels and qualitative and quantitative aspects of work experience which both Quińones et al. (1995) and Tesluk and Jacobs (1998) describe nicely capture the different aspects of the work experience construct. From the point of view of a job vacancy, and job applicants applying for the vacancy, some aspects of their experience will be relevant to the job in question and some will not be, or will be less relevant. Thus, different aspects of a person's previous work experience can then be measured in order to acquire a more or less accurate estimate of the relevance of a person's previous experience. From the point of view of this work, *relevance* is defined as the ability of previous experience to help ensure workplace safety. The discussion now examines how relevance might differ markedly across different measures of work experience.

Limitations of Time and Amount Measures of Work Experience

Time measures of work experience refer to conventional measures of work experience such as job or organisational tenure (e.g., the number of months or years spent in a particular job or organisation). Unfortunately, within the applied psychological literature, work experience and job or organizational tenure have been used almost interchangeably (Hofmann, Jacobs, & Gerras, 1992; McDaniel, Schmidt, & Hunter, 1988a; Schmidt, Hunter & Outerbridge, 1986; Schmidt, Hunter, Outerbridge, & Goff, 1988). However, the problem with measuring work experience using time is that it has serious limitations, and very little, if any ability to predict future behaviour. For example, duration of time employed in a job (or with an organisation, etc.) does not necessarily result in identical outcomes for all employees. Some individuals may enhance their performance after a while, while others performance may worsen or

change less methodically (Hoffman et al., 1992; Hoffman, Jacobs, & Baratta, 1993). Furthermore, as discussed above, defining work experience using time overlooks significant experiences that accumulate over time; including occasions to carry out roles or tasks and the type and quality of particular experiences (Quińones et al., 1995).

A search of the literature on work experience found a small body of research which has examined the ability of past work experience, as measured by a time based measure, to predict job safety (Leigh, 1986; Li et al., 2003; Tenny, 1988; van der Flier & Schoonman, 1988). Leigh (1986) examined the relationship between total years of work experience and the probability of being injured on the job and found no relationship. Correspondingly, Tenny (1988) studied the relationship between total hours of flying time and severity of a given aircraft accident and also found no relationship. However, Li et al. (2003) found total flight time to be a critical element of crash risk. Specifically, having a total flight time of 5000 or more hours decreased the risk of crashing by more than 50 percent. Finally, van der Flier and Schoonman (1988) used railway engine drivers length of service (e.g., years of experience as a driver) to investigate the relationship between prior experience and stop signal abuse. The authors found no clear relationship between engine driver's length of service and stop signal abuse.

As previously stated, work experience is also measured in applied work, such as during the employee recruitment process. To give an appreciation of how work experience is being used in employee recruitment; a search of job advertisements on www.seek.co.nz, which is a New Zealand recruitment website was undertaken on one day in 2015 (Seek, 2015). The search used the category parameters: Canterbury, Christchurch, Plant and Machine Operators. Plant and Machine operators can be exposed to a number of risks and hazards in the workplace such as exposure to electricity, falling objects, and proximity to flammable or combustible materials. As such, there is certainly a safety component

associated with this job category. The search produced 40 job advertisements. Of those 40 job advertisements, 37 mentioned work experience as a prerequisite for making a job application. An analysis of the advertisements revealed the use of three different types of work experience criteria: simply mentioned experience needed (e.g., "must be experienced"); asked for length of tenure of experience (e.g., "have at least three or more years' experience working as a block layer"); and asked for type of experience (e.g., "must have asphalting experience"). Of the ads which mentioned work experience as a prerequisite for making a job application: 16% simply stated that past work experience was needed; 33% were interested in the length of tenure of past work experience; and 51% were interested in the type of previous work experience. These search results reveal that time based criteria for work experience are perhaps reasonably common in the advertisement process to screen out potentially inappropriate candidates, and that a large portion of organisations are potentially using a time based measure of work experience.

The problem with this is that using a time based work experience criteria in a job advertisement blocks some individuals from applying when in fact they might have the experience to perform the job. Furthermore, and possibly more problematic in terms of safety, an individual may apply and be considered experienced when in fact they have very little previous experience that is similar to the job they are applying for. For example, think of a job advertisement recruiting truck drivers to work in an opencast mine. An applicant with six months of identical work experience may be deterred from applying because the advertisement says 'two years trucking experience essential.' In contrast, consider another applicant with five years trucking experience, but in a completely different trucking industry (e.g., a household's good truck driver). This applicant might apply because they do have two years trucking experience, however very little of their previous experience is likely to be similar to that of the new job.

Typically, the next stage in the hiring process is selection assessment. During selection processes the organisation has the opportunity to measure work experience by assessing the applicant's response on employment history in an application blank, their employment history in their CV, or by asking employment history questions during an interview. Some research which has examined the validity of different selection predictors, has found job experience to be a weak predictor of performance. For example, Hunter and Hunter (1984) reported a correlation of .18 between work experience (as measured by job tenure) and job performance. Later, McDaniel et al. (1988a) reported a correlation of .32 between work experience (as measured by organisational tenure) and job performance. Finally, Schmidt and Hunter (1998) reviewed meta-analytic findings of the predictive validity of several selection procedures and examined the validity of combining general cognitive ability with one other procedure. Results indicated work experience (as measured by job tenure) combined with cognitive ability had a predictive validity of (r = .18). It is interesting to note that all three of these studies used a time based measure of work experience; either job or organisational tenure, as a way to measure work experience. Perhaps the small criterion related validity values found are more a reflection of the way in which work experience has been measured, rather than the true relationship between work experience and job performance.

Clearly, time based measures of work experience have limited ability to predict, yet they are often used in research and in recruitment processes. Time based measure's inability to predict is consistent with the preceding discussion of the concept of work experience. Job or organisational tenure only provides an opportunity for variability in previous work experience, which as noted increases the chances of similarity between the past and present, but it does not indicate similarity exists. Accordingly hypothesis 1 was formed;

Hypothesis 1. Measuring work experience using time (i.e., cumulative job tenure) will be a poor predictor (as indicated by no significant correlation) of similarity between past job experience and future job requirements.

As previously mentioned, work experience can also be measured in terms of amount measures. Amount measures of experience refer to numerical counts such as the total number of times performing a task (Lance, Hedge, & Alley, 1989; Vance, Coovert, MacCallum & Hedge, 1989), the total number of organisations a person has been employed in (e.g., a digger driver may have worked for 3 different excavator companies), or the total number of jobs a person has performed (e.g., an individual may have held three different digger operator jobs). However, similar to time based measures of work experience, amount based measures of work experience also classify work experience narrowly in quantitative terms. They offer little information in terms of the quality or type of work experience and therefore allow only a limited evaluation of the work experience construct (Tesluk & Jacobs, 1998).

For instance, consider the example of a digger operator. Within the excavator industry there are a number of different jobs a digger operator could perform, such as: digging trenches, demolition, snow removal and forestry work. An individual may have held five different digger operator jobs or worked for five different excavator companies, but all of these jobs or organisations may have been focused on snow removal. As a result, if that same digger operator, who remember has only ever driven a digger with a snowplow or snow blower attachment, was hired to drive a forestry mulching machine (a different type of digger), very little of their past work experience might have similarity to the aspects of the new job: the terrain would be completely different, the digger attachment different, the operational characteristics different. Essentially measuring work experience by identifying the total number of organisations an individual has worked for or the total number of jobs they have held has limited ability to reflect similarity between the past and future. Thus,

similar to time measures, amount measures of work experience only provide an opportunity for variability in previous work experience, which as noted increases the chances of similarity between the past and the present, but it does not indicate similarity exists. Accordingly hypotheses 2 and 3 were formed;

Hypothesis 2. Measuring work experience by identifying the total number of jobs an individual has held will be a poor predictor of similarity (as indicated by no significant correlation) between past job experience and future job requirements.

Hypothesis 3. Measuring work experience by identifying the total number of organisations an individual has been employed with will be a poor predictor of similarity (as indicated by no significant correlation) between past job experience and future job requirements.

Finally, given the predictions that time and amount measures of work experience are likely to be poor indicators of experience, it is surprising that the meta-analysis review (*N* =25,911) of the work experience literature conducted by Quińones et al. (1995) found that 79.5% of studies measured work experience using a time measure such as, time in a company; time employed in a certain job; or cumulative time in a particular organisation, while 11.4% of studies measured work experience as 'the number of times performing a task'. What is more, once you begin to understand and acknowledge the limitations of time and amount measures of work experience, the implications for organisations measuring work experience during the hiring and selection process become evident.

Three New Measures of Work Experience

It is important for both researchers and organisations to realise that they must assess more than just a job applicant's cumulative employment history when measuring work experience. That is, more detailed and specific experience related questions are necessary in order to

obtain a more complete profile of an employee's previous experience. As such, this dissertation examines three measures of work experience which are expected to be good predictors of similarity between past job experience and future requirements of a job. The key feature of these three measures of work experience is the level of specificity at which they measure work experience. It is argued that these three measures of work experience could be included as questions in the work history section of an application blank or during a structured interview.

Burt (2015) put forward a series of experience related questions which could be incorporated into a structured selection interview. He believes that using more detailed and specific experience related questions that assess both the amount of variability and similarity in previous work experience should lead to a more accurate assessment of how long it will take the applicant, if hired, to reach a satisfactory level of experience (e.g., a correct gauge of the level of training and guidance required in order to make sure the new employee remains safe). As such, this paper presents the three measures of experience proposed by Burt (2015). These three measures of work experience are intended to focus more on the nature and quality of an individual's past work experience rather than just time and amount aspects of work experience.

For example, work experience was measured by identifying the total number of organisations the target job has been performed in. The key aspect to this question is that it asks participants the total number of organisations that the *target* job has been performed in, as opposed to simply asking the participants the total number of organisations they have been employed with. The target job refers to what they are going to do in the future or the job they are being recruited into. It is argued that by measuring work experience at this increased level of specificity, one should obtain a more accurate estimate of the similarity between past job experience and future job requirements. For example, consider two truck drivers applying for

a job to drive a dump truck in an opencast mine. One truck driver has worked for five different trucking companies but none of these companies were involved in opencast mining. In contrast, the second truck driver has only worked for two trucking companies but both of these companies were involved in opencast mining. Clearly, the second truck driver is more likely to have similarity between past job experience and the future requirements of the job and thus more experience. However, if both truck drivers had simply been asked to identify the total number of trucking companies they had worked for, the first truck driver would have likely been incorrectly chosen as being more experienced. Accordingly hypothesis 4 was formed;

Hypothesis 4. Measuring work experience by identifying the total number of organisations the target job has been performed in will be a good predictor of similarity (as indicated by a significant correlation) between past job experience and future job requirements.

In addition, work experience was also measured by identifying the total number of work groups or teams the target job has been performed in. When a group of people work together to achieve a shared purpose, there are often variations in the way in which the group can achieve the desired goal. Each individual is likely to bring with them their own ideas and ways of reaching the end point. As such, each time an individual enters a new work group or team, they must adjust and familiarise themselves with the team's specific operational characteristics. Thus, the more work groups or teams an individual has performed the target job in the more likely they are to have previously come across some of the team's operational characteristics, and as a result have more similarity between the past and future. In contrast, a job applicant who has only ever performed the target job in one work group will be unlikely to have had the opportunity to experience how different individuals might work and thus have less similarity between the past and future. Accordingly hypothesis 5 was formed;

Hypothesis 5. Measuring work experience by identifying the total number of work groups or teams the target job has been performed in will be a good predictor of similarity (as indicated by a significant correlation) between past job experience and future job requirements.

Finally, the last measure of work experience identifies the total number of work environments the target job has been performed in. It is argued that the more work environments the target job has performed in in the past, the more likely the job applicant will have similarity between past job experience and future requirements of a job. Consider the example of two truck drivers applying for a job. A truck driver can work anywhere from the urban city to radical mountain terrain with each terrain requiring a very specific set of driving knowledge, skills and abilities. As such, a truck driver who has experience driving trucks in a number of different terrains is more likely to have similarity between past job experience and future requirements of a new job when compared to a truck driver who has only ever driven trucks in one type of terrain. Once again, it is argued that by measuring work experience at this increased level of specificity, one should obtain a more accurate evaluation of the similarity between past job experience and future requirements of a job. Accordingly hypothesis 6 was formed;

Hypothesis 6. Measuring work experience by identifying the total number of work environments the target job has been performed in will be a good predictor of similarity (as indicated by a significant correlation) between past job experience and future job requirements.

In summary, work experience is a multifaceted and dynamic construct. It is not enough for organisations and researchers alike to use time and amount measures of work experience to assess an individual's experience. More detailed and specific experience related

questions are necessary in order to obtain a more complete profile of an employee's experience. As such, the focus of this dissertation is to demonstrate this by comparing six different measures of work experience. It is argued that the key aspect of work experience for safety is similarity between the past and the present. Subsequently, each of the six measures of work experience are assessed on their ability to predict similarity between past job experience and future requirements of a job. Specifically, two measures of similarity were of interest: similarity of the work tasks and similarity of the work environment. It is argued that three measures of experience (i.e., cumulative job tenure, total number of jobs, and total number of organisations) will be poor predictors of similarity between past job experience and future job requirements. In comparison, three more detailed and specific experience related measures (i.e., measures of experience which identify the total number of organisations, work groups or teams, and work environments the *target* job has been performed in) will be good predictors of similarity between past job experience and future job requirements.

Previous Experience and Safety

An additional purpose of this dissertation was to examine the nature of the relationship between previous work experience and safety. As noted, work experience plays an important role in safety behaviour (Butani, 1988; Fabiano et al., 2008; Gyekye & Salminen, 2010; Keyserling, 1983; Leigh, 1986; Li et al., 2002; Paul & Maiti, 2007; Root & Hoefer, 1979). Based on this, organisations hire on the grounds of work experience because they anticipate a more experienced individual to behave more safely. Figure 1 shows two pathways from similarity of previous experience to safety. One pathway is through the provision of appropriate job specific knowledge, skills and abilities learnt through previous experiences which facilitates appropriate (safe) behaviour (Gyekye & Salminen, 2010). Experience provides for the transformation of declarative knowledge into procedural knowledge (Bonner

& Walker, 1994). Or put another way, an inexperienced employee may not have obtained the knowledge, skills and abilities to act appropriately on the job, and as a result their actions (unsafe behaviour) can give rise to an accident.

The second pathway is through an increased speed of familiarisation, with an experienced new employee taking less time to familiarise with a new workplace (the job, work environment, co-worker behaviour, etc.) (Pinder & Schroeder, 1987). Safety is enhanced because familiarisation requires attention, and allocation of attention to familiarisation might reduce situational awareness. Situational awareness is described as 'all knowledge that is accessible and can be integrated into a coherent picture, when required to assess and cope with a situation' (Sarter & Woods, 1991, p. 55). Situational awareness is understood to be critical for the concept of safety and it is argued that even minute slips in situational awareness can have dangerous results (Stanton, Chambers, & Piggott, 2001). Although situational awareness has been predominantly studied in the aviation sector, researchers have begun to highlight its wider application to any context that requires attention (Gaba, Howard, & Small, 1995; Sarter & Woods, 1991). Thus based on Figure 1, hypothesis 7 was formed;

Hypothesis 7. Similarity between past and present experience will facilitate safety.

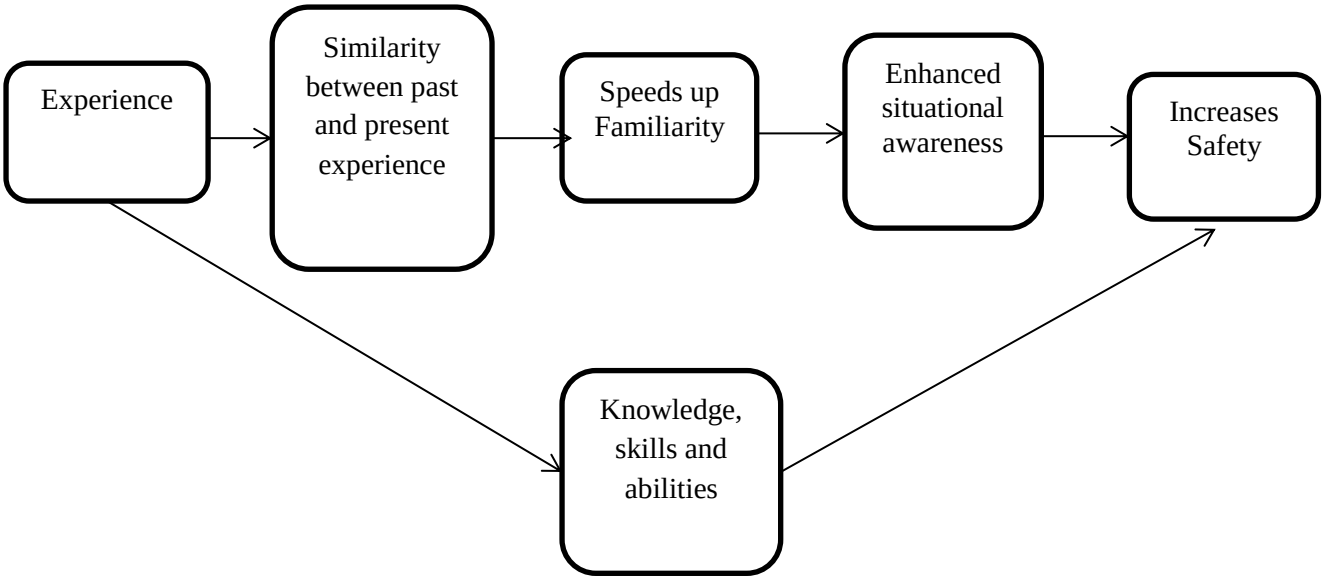

Figure 1.Two pathways through which previous experience might facilitate safety.

It is important to note that this dissertation only examines whether or not similarity between past and present experience facilitates safety. Examining the two pathways through which similarity between past and present experience might facilitate safety (e.g., through the provision of job specific knowledge, skills and abilities learnt through previous experiences or an increased speed of familiarisation and thus enhanced situational awareness) was beyond the scope of this dissertation. As such, the aim of this dissertation is to test the 7 hypotheses, and provide a framework upon which future research can be built on.

Method

Sampling and Participants

Data for this study was collected as part of a larger data collection effort for several studies on employee safety. Persons in control of health and safety management (i.e., health and safety manager or the human resources manager) in a number of organisations across the construction, food processing and coal mining industries were contacted via email or phone,

whereupon a brief description of the study was provided. Organisations that expressed interest in participating were then given an in-depth explanation of the study through the use of a detailed email or scheduled meeting.

Participants were recruited for the study from participating organisations in one of two ways. Either an employee of the organisation's management team informed suitable employees; or, advertisements were placed around the organisation. The advertisement (see Appendix A) included information about the study, the prerequisite requirements of participants (which did not specifically relate to this study), the benefits of participating (participants had the opportunity to go into the draw to win a brand new TV) and contact details of the researcher. It is important to note that the prerequisite requirements of participants, despite not being directly relevant to this study, did not inhibit this study in any way. The focus of this study related to participants' previous work experience not their current work experience.

In addition, workplace safety associations throughout New Zealand were contacted via email or phone. At which point a brief outline of the study was given. For those associations expressing interest in assisting in the research, an in-depth explanation of the study was provided through the use of a detailed email or phone-call. Association members (individuals responsible for health and safety management) were then contacted about the study from participating associations in one of two ways. Either directly via an email from the association; or through an advertisement placed on the association's website. This advertisement (see Appendix B) included information about the study, the prerequisite requirements of participants (which did not specifically relate to this study), the benefits of participating (participants had the opportunity to go into the draw to win a brand new TV) and contact details of the researcher. For those association members expressing interest in

participating, an in-depth description of the study was provided through the use of a scheduled meeting or detailed email.

In total, 50 paper questionnaires were distributed. It was possible to participate via an online link (in Qualtrics). As an indication of response rate 30 questionnaire packs were administered in one organisation and 18 completed questionnaires were returned, giving a response rate of 60%. Fifteen questionnaire packs were administered to a second organisation and 11 completed questionnaires were returned, giving a response rate of 73%. Five questionnaire packs were administered to a third organisation and four completed questionnaires were returned, giving a response rate of 80%. The remainder of the data was collected via an online link in which either; participants were recruited through the use of advertisements placed around organisations' (See Appendix A), or participants were directly approached by a member of the organisation's management team and given a copy of the advertisement.

The sample originally consisted of 80 participants. However, 22 cases containing more than ten percent missing data were removed, reducing the overall sample size to 58. Participants came from the following industries: construction (31%), food processing plant (19%), coal mining (7%), and other (43%). Overall there were 36 males with an average age of 41.9, an age range of 24 to 62 years, and a standard deviation of 10.6 years; and, 22 females with an average age of 35, an age range of 22 to 54 years, and a standard deviation of 12.04 years.

Materials

The online and paper versions of the questionnaire were identical, and the front page provided information about confidentiality, anonymity, informed consent, ethics approval, and how to obtain project results (see Appendix C and D respectively). The second page of

both the online and paper questionnaire provided instructions for completing the questionnaire (see Appendix E and F respectively). The questionnaire (see Appendix G) contained 16 sections. Only sections relevant to this dissertation are discussed in detail below. Three sections were relevant to this study: the demographic section, the previous work experience section, and the job risk scale section. The ordering of the sections (with the exception of the demographic question section, which was always at the beginning and the experimental (between-groups) question, which was always at the end) was counterbalanced to help control for common method variance (Kline, Sulsky, & Rever-Moriyama, 2000).

Demographic section. The demographic section asked questions regarding age, gender, current job tenure, total employment tenure, total number of jobs held, *the 90 day trail period*, *job applicant category*, and *the total number of co-workers*. The questions shown in italics were not part of this study.

Job Safety scale. The 10-item Job Safety scale, developed by Hayes, Perander, Smecko, and Trask (1998) was used to assess occupational risk perceptions that the participants have about their jobs. This was important given the focus on safety, and the need to ensure the sample was appropriate for this purpose. Using a 5-point Likert scale, anchored with 1 = strongly disagree and 5 = strongly agree, participants indicate the extent to which they agree with words or phrases that describe their job. One item was reversed coded, and the rating were summed and divided by 10. A higher score signifies greater felt risk in the job. Example items from this scale include: *Unsafe, Risky,* and *Fear for health.* The scale produced a satisfactory coefficient alpha of .90.

Measuring previous work experience. Six items were used to measure different components of participants previous work experience (see appendix G, sections 1 and 2). Three items were based on time and amount aspects of work experience. The first item asked:

in total how long have you worked for? ____*years and* ____ *months.* Participants responded by indicating the number of years and months. The second and third items asked: *in total how many different jobs have you had?* And *how many different organisations have you worked for?* Participants responded with a numerical value for both questions. The last three items were based on the more detailed and specific experience related questions proposed by Burt (2015). The three items were: *how many different organisations have you undertaken this job in? How many different work groups or teams have you performed this job with? And how many different work environments have you undertaken this job in?* Participants were asked to think only about their current job and respond to all three items using a numerical value.

Measuring safety. Three accident and incident categories were used to measure participants' history of safety in the workplace. The three categories were: *near miss incidents, which had it turned out differently, could have resulted in injury or damage; minor injuries, requiring medical attention (e.g., first aid treatment or a visit to a doctor);* and *Lost Time Injury (LTI) that has required you to take time off work.* Participants responded by indicating how many times they had been involved in each category **in their current job.** Participants were asked to respond with a zero if the answer was none.

Measuring similarity. Two items were used to measure the similarity of participants' past and present work experience. The first item asked: *how similar is the work environment of the job you are currently doing compared to work environments you have worked in in the past?* Participants responded using a 10-point scale from 1 = never worked in this type of environment to 10 = extremely similar. The second item asked: *how similar are the work tasks of the job you are currently doing compared to work tasks you have performed in the past.* Participants responded using a 10-point scale from 1 = never performed similar tasks to 10 = extremely similar.

Procedure

Upon recruitment, the questionnaire was administered to participants in one of two ways: distributed by a member of the organisation's management team; or online via a link or QR code. In the instances where the questionnaire was administered by a member of the organisation's management team, a 'questionnaire pack' was given to the participant. Each pack contained a copy of the questionnaire, a return envelope, and a prize draw form with a separate return envelope (see Appendix H). Participants were asked to seal their completed questionnaire in the large envelope provided and completed prize draw form in the small envelope provided to ensure anonymity. The completed questionnaires and prize draw forms were picked up directly by the researcher.

In the situations where the respondent completed the questionnaire online using Qualtrics, once the respondent had answered all questionnaire items they were then asked if they would like to go into the draw to win a brand new 55" TV and viewed a screen containing the following statement:

Do you want to be entered in a draw to win a brand new 55" TV? The information you provide to enter the draw is not linked to your responses and will remain confidential. The study will close on the 30th of September 2015 after which the winner will be contacted (TV must be picked up from any Dick Smith location throughout New Zealand.)

Participants could respond by either choosing Yes or No. If the participant clicked the "No" button, indicating that they did not wish to enter the draw, a "Thank you" screen was displayed, informing them that the study was complete. If the participant clicked the "Yes" button, indicating that they did wish to enter the draw, a screen asking them their first name, last name and email address was displayed. Once participants had filled out these details, a "Thank you" screen was displayed, informing them that the study was complete.

Results

Data Preparation

Data from Qualtrics was downloaded into SPSS Statistics 17.0 database and then the remaining data from paper questionnaires was entered. Twenty two cases containing more than 60 percent missing data were removed. The remaining missing data was not replaced with means which resulted in some slight *N* = variance across the analyses.

Analysis

Table 1 shows descriptive statistics for the six different measures of work experience. These descriptive statistics suggest that there was no issue of sampling bias within the sample (e.g., the sample had sufficient past work experience to investigate issues relating to the measurement of work experience), and that the majority of participants were at the middle stage of their career with a considerable amount of work experience. It is also interesting to note that the means vary across the two sets of work experience measures. With the means for the three measures of work experience based on time and amount measures of work experience (i.e., cumulative job tenure, total number of jobs and total number of organisations) being larger than the means for the three measures of work experience proposed by Burt (2015) (i.e., measured work experience by identifying the total number of organisations, work groups or teams, and work environments the target job has been performed in). This suggests that for this sample, the first three measures of work experience (i.e., cumulative job tenure, total number of jobs and total number of organisations) include information which is not directly related to the experience required for their current job. That is, not all job tenure, or jobs and organisations from the past can be truly described as providing experience for the participant's current job. It these variables were reflecting experience, then one would expect there to be more similarity between the means across the two sets of work experience measures.

Table 1.

Means and Standard Deviations for Six Measures of Work Experience.

	N	M	SD
Total Number of Jobs	57	7.12	4.91
Cumulative Job Tenure (years)	58	20.83	11.74
Total Number of Organisations	58	5.87	2.85
Number of Organisations Target Job Undertaken In	56	2.78	2.27
Number of Work Groups or Teams Target Job Performed In	55	5.45	11.06
Number of Work Environments Target Job Performed In	52	4.98	13.80

To test hypotheses 1, 2, 3, 4, 5 and 6, Person product moment correlations were calculated. Each of the six measures of work experience was correlated with the two measures of similarity between past and present experience (i.e., similarity of the works tasks and similarity of the work environment). The results are shown in Table 2. In support of hypothesis 1, 2 and 3; cumulative job tenure, total number of jobs and total number of organisations showed no significant relationship with both measure of similarity between past and present experience. These findings are consistent with the hypotheses and do suggest that these three measures of work experience are poor predictors of similarity between past job experience and future job requirements.

In support of hypothesis 4, the number of organisations the target job has been performed in was significantly positively correlated with both measures of similarity between past and present experience. That is, the more organisations a participant has performed the

target job in the more likely they are to have similarity between the work tasks and work environment of their current job and past jobs. As such, this finding suggests that measuring work experience by identifying the number of organisations an individual has performed the target job in is a good predictor of similarity between their past job experience and future requirements of a job.

In partial support of hypothesis 5, the number of work groups and teams the target job has been performed in was significantly positively correlated with the work task measure of similarity between past and present experience. That is, the more work groups or teams a participant has performed the target job in the more likely they are to have similarity between the work tasks of their current job and previous jobs. However, the relationship between measuring work experience by identifying the total number of work groups or teams the target job has been performed in and the work environment measure of similarity was only approaching significance. Hence hypothesis 5 was only partially supported. Nonetheless, these two findings still suggest that measuring work experience by identifying the number of work groups or teams an individual has performed the target job in appears to be a reasonably good predictor of similarity between past job experience and future requirements of a job. Contrary to hypothesis six, no relationship was found between the number of work environments the target job has been performed in and both measures of similarity between past and present experience. This is a surprising result and is discussed in more detail in the discussion.

Table 2.

Correlations between Six Measures of Work Experience and Two Measures of Similarity between Past and Present Experience.

	N	Similarity of Work Environment	Similarity of Work Tasks
Total Number of Jobs	57	.09	.14
Cumulative Job Tenure	58	.08	.14
Total Number of Organisations	58	.03	.00
Number of Organisations Target Job Undertaken In	56	.38**	.44**
Number of Work Groups or Teams Target Job Performed In	55	.22^{+}	.27*
Number of Work Environments Target Job Performed In	52	-.19	.13

Note. **correlation is significant at the .01 level (2-tailed). *correlation is significant at the.05 level (2-tailed). $^{+}$correlation approaching significance $p = .09$

To test hypothesis 7, a new variable was created which divided participants into two cohorts: accident (participants who reported they had experienced a minor injury and/or a LTI in their current job) and no accident (participants who reported that they had not experienced a minor injury and/or LTI in their current job). This resulted in an even split in the data. That is, there were 29 participants in the accident group and 29 participants in the no accident group. A one-way between subjects ANOVA, in which the between-subject factors were accident or no accident and similarity of the work tasks, revealed that mean similarity of

work tasks was significantly higher in the no accident condition compared to the accident condition. In addition, a one-way between subjects ANOVA, in which the between-subject factors were accident or no accident and similarity of the work environment, revealed that mean similarity of the work environment was significantly higher in the no accident condition compared to the accident condition. The means and ANOVA results are shown in Table 3 and suggest that similarity between past and present experience facilitates safety. In order to make sure a third variable was not causing this relationship, the two accident groups were tested for differences in the following variables: cumulative job tenure, total number of jobs held, total number of organisations, age and job risk. Table 3 reveals that cumulative job tenure, total number of jobs held, total number of organisations, age and job risk did not vary significantly between the two accident groups.

Table 3.

Output for the ANOVA Analysis that Compared Two Accident Conditions for Two Similarity Measures, Cumulative Job Tenure, Total Number of Jobs, Total Number of Organisations, Job Risk and Age.

	Mean No Accident Group N = 29	Mean Accident group N= 29	F-ratio	Sign.
Age	1.45	1.31	1.155	ns
Job Risk	2.31	2.48	.729	ns
Cumulative Job Tenure	21.08	20.58	.026	ns
Total Number of Jobs	7.92	6.34	1.493	ns
Total Number of Organisations	5.96	5.79	.052	ns
Similarity of Work Tasks	6.83	5.04	4.269	.05*
Similarity of Work Environment	7.00	5.19	5.116	.05*

Note. ns = non-significant ($p < .05$), *$p < .05$. N=29.

Discussion

Summary of Major Findings

The aim of the study was to examine six different measures of work experience as well as the relationship between previous experience and safety. Hypothesis 1, 2 and 3 related to three measures of work experience that were based on time and amount measures of experience (i.e., cumulative job tenure, total number of jobs and total number of organisations).

Hypothesis 4, 5 and 6 related to three measures of work experience proposed by Burt (2015) (i.e., measured work experience by identifying the total number of organisations, work groups or teams, and work environments the target job has been performed in).

In support of hypothesis 1, 2 and 3: cumulative job tenure, total number of jobs and total number of organisations showed no significant relationship with both measures of similarity between past and present experience (i.e., ratings of similarity of work tasks and similarity of the work environment). That is, measuring work experience using either: cumulative job tenure, the total number of jobs an applicant has held or the total number of organisations an applicant has worked for, are unlikely to be good predictors of similarity between past job experience and future requirements of a job. These findings support the suggestion that time and amount based measures of experience are poor predictors of similarity between past and present experience, and thus experience (Burt, 2015; Quińones, et al., 1995; Tesluk & Jacobs, 1998). That is, measuring work experience using cumulative job tenure, or by identifying the total number of organisations an individual has worked for or the total number of jobs they have held has limited ability to reflect similarity. These three measures of work experience only provide an opportunity for variability in previous work experience, which as previously noted increases the chances of similarity between the past and the present, but it does not indicate similarity exists. Later in this paper, the safety implications of having similarity between past and present work experience is discussed.

In contrast to time and amount based measures of experience which are shown to provide very little information regarding what a person has actually done during their employment history, three more detailed and specific experience related questions were proposed and assessed. In support of hypothesis 4, there was a significant positive relationship between the number of organisations the target job has been performed in and the two measures of similarity between past and present experience (i.e., ratings of similarity of

work tasks and similarity of the work environment). That is, the more organisations the target job has been performed in the more likely an individual will have previously come across the specific work tasks and work environments of the current job, and as a result have more similarity between the past and the future, and thus be considered as experienced. As previously mentioned, the target job refers to what a participant is going to do in the future or the job they are being recruited into. As such, this finding supports the argument that measuring work experience at this level of specificity (i.e., by measuring work experience by identifying the total number of organisations the target job has been performed in as opposed to just the total number of organisations an individual has worked for) is likely to be a better predictor of similarity between past and present experience.

In regards to hypothesis 5, there was a significant positive relationship between the number of work groups and teams the target job has been performed in and the work task measure of similarity between past and present experience. That is, the more work groups and teams the target job has been performed in the more likely an individual will have previously come across the specific work tasks of the current job and thus have some degree of similarity between past and present experience. However, the relationship between measuring work experience by identifying the total number of work groups or teams the target job has been performed in and the work environment measure of similarity was only approaching significance. Thus, hypothesis 5 was only partially supported. Nonetheless, these two findings support the argument that the more work groups or teams an individual has performed the target job in the more likely they are to have previously come across some of the new team's operational characteristics, and as a result may have more similarity between the past and future and thus be considered as experienced. In summary, measuring work experience by identifying the number of work groups or teams an individual has performed

the target job is likely to be a reasonably good predictor of similarity between past job experience and future job requirements.

Contrary to hypothesis 6, no relationship was found between the number of work environments the target job has been performed in and the two measures of similarity between past and present experience (i.e., ratings of similarity of work tasks and similarity of the work environment). This result is surprising and somewhat interesting. The mean number of work environments participants reported working in was very high (M = 4.98, SD = 13.80). Yet, despite this great variability in previous work environments, participants still appear to be working in an unfamiliar work environment. One possible explanation for these non-significant findings may be the 2011 Christchurch Earthquake. The majority of the data was collected in Christchurch, with the exception of a few cases which were collected outside of Christchurch. As a result, many of the participants have been essentially working in an active earthquake zone. Earthquake zones are undoubtedly unique environments which are unlikely to have been experienced before. Clearly it would be worthwhile to assess this measure of work experience on a group of participants who are not working in an active earthquake zone.

Combined these findings have important implications for organisations looking to stipulate experience requirements in recruitment advertisements and/or measure work experience during the hiring process. The findings suggest that using time and amount based measures of work experience (i.e., cumulative job tenure, total number of jobs and total number of organisations) are unlikely to be good predictors of similarity between past and present experience. On the other hand, using measures of work experience which are more detailed and specific in nature (i.e., measuring work experience by identifying the total number of organisations or work groups and teams the target job has been performed in) are likely to be good predictors of similarity between past and present experience. The next

section examines the safety implications of having similarity between past and present experience.

An additional aim of the dissertation was to examine the relationship between previous experience and safety. That is, whether or not similarity of past and present experience facilities safety. In support of hypothesis 7, participants who reported no accidents in their current job had larger similarity ratings between their past and present work experience in comparison to participants who did report an accident in their current job. There was no significant difference between the accident and no accident groups in terms of age, job risk, cumulative job tenure, total number of jobs and total number of organisations; suggesting that there was no third variable causing this result. As such, this finding supports the argument that the key aspect of work experience for safety is similarity between the past and the present. Or put another way, it is what an individual has actually done during their employment tenure and how these tasks translate to their new job that is crucial for a person to be considered experienced and thus ensure their safety (Burt, 2015).

Furthermore, this finding also suggests that by measuring work experience using more specific and detailed experience related questions which are good predictors of similarity between past and present experience, an organisation may be better able to predict an employee's involvement in an accident. Past studies examining the relationship between past experience and safety (Leigh, 1986; Li et al., 2003; Tenny, 1998; van der Flier & Schoonman, 1988) have been conflicting. One possible explanation for the divergence in findings is that all four of these studies used a time based measure of work experience. Measuring work experience using time (i.e., cumulative job tenure) as shown in this research, is likely to be a poor predictor of similarity between past and present experience. As such, by using measures of work experience which are good predictors of similarity between past and

present experience, one might obtain a more accurate prediction of an individual's involvement in an accident.

Limitations and Future Research

While this dissertation adds to the work experience literature in a number of ways, there are some important limitations that are worth mentioning. The first limitation is that the data that is reported in this research is embedded in a much larger data collection. Thus, it could be argued that participants' responses to the measures relevant to this research may have been influenced by their responses to measures that were not relevant to this research. However, this is unlikely seeing as the measures relevant to this research were biographical and objective in nature, while the remaining measures were attitudinal. What is more, in order to reduce the influence of common-method variance the order of the pages throughout the questionnaire were counter-balanced. Common-method variance is described as variance that instead of being assigned to the constructs the measures signify is ascribed to the measurement method (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003).

The problem of social desirability distorting the results is unlikely as participants really had no reason to lie. The only measure that may have been affected by participants responding in a socially desirable manner is the accident and incident categories question which required participants to indicate how many incidents or accidents they had been involved in for each of the three categories. There is a large body of research which has found significant evidence of under-reporting of workplace accidents and injuries across a range of countries and occupations (Biddle, Roberts, Rosenman, & Welch, 1998; Morse, Dillon, Warren, Levenstein, & Warren, 1998; Pransky, Snyder, Dembe, & Himmelstein, 1999; Rosenman et al., 2000). However, the finding that 29 participants reported being involved in an accident in their current job and 29 participants reported having not being involved in an accident in their current jobs suggests that participants were answering honestly.

The remaining limitations are argued to not be limitations per se but rather areas for which future research should be conducted. As previously mentioned, the aim of this dissertation was to provide a framework upon which future research can be built on. As such, there are a number of aspects of this dissertation which could be extended on. However, the strength of the preliminary findings in this dissertation suggests that more intensive research into these areas would be worthwhile. For example, it could be argued that work experience can be measured at even finer grained levels than that which the two significant measures of work experience examined in this dissertation assess. Both the framework proposed by Quińones et al., (1995) and Tesluk and Jacobs (1998) highlight that there are many different facets to the work experience construct. The six measures of work experience assessed in this dissertation only scratch the surface of the work experience construct. Nonetheless, the preliminary finding that measuring work experience using more detailed and specific experience related questions are likely to be good predictors of similarity between past and present experience suggests that future research which examines even finer grained measures of work experience would be worthwhile. For example, work experience could be measured by identifying how many months of job related training a person has received or how many opportunities they have had instructing others in the tasks relevant to the target job (Burt, 2015).

In addition, it could be argued that a limitation of this dissertation was that the causal mechanisms through which similarity between past and present experience might increase safety were not explored. However, as previously mentioned, the aim of this dissertation was to provide a framework upon which future research can be built on. An examination of the possible theoretical mechanisms in which similarity between past and present experience facilitates safety was beyond the scope of this dissertation. Nonetheless, the preliminary finding that participants who did not report an accident in their current job had larger

similarity ratings between their past and present experience in comparison to participants who did report an accident in their current job suggests that it would be worthwhile for future research to examine potential reasons for why increased similarity between past and present experience may facilitate safety. For example, the model proposed in Figure 1 suggested two pathways from which similarity between past and present experience might increase safety. As such, a time-series or repeated measures design could be conducted which examines people entering the workplace with similarity between past and present experience and if this similarity between past and present experience speeds up familiarisation and thus enhances situational awareness and/or they have increased job specific knowledge, skills and abilities.

Related to the development of familiarity in a job, within the work experience literature there is a large number of studies which have examined the relationship between current experience and safety (Butani, 1988; Cellier, Eyrolle & Bertrand, 1995; Fabiano et al., 2008; Frone, 1998; Gyekye & Salminen, 2010; Hansen, 1989; Iverson & Erwin, 1997; Keyserling, 1983; Leigh, 1986; Paul & Maiti, 2007; Root & Hoefer, 1979; Savery & Wooden, 1994). Current experience is defined as time since the person started the job, but as noted below the precise definition used varied somewhat from scholar to scholar. Similar to the research examining the relationship between cumulative work experience and safety, the literature examining the relationship between current experience and safety is also conflicting. Some authors argue that this might be explained by the divergence in definitions and assessments of work experience used across the studies (Quińones et al., 1995; Tesluk & Jacobs, 1998). However, even when the research is categorised according to how current work experience was measured the empirical findings are still mixed. As such, a summary of the research is provided but it has been categorised according to how work experience was measured. Following this, an alternative explanation for why the results are mixed is put forward, with a particular focus on the contribution of the findings in this dissertation.

The majority of studies which have examined the relationship between current work experience and performance used organisational tenure as the definition and as a measure of work experience (Butani, 1988; Gyekye & Salminen; 2010; Hansen, 1989; Iverson & Erwin, 1997; Paul & Maiti, 2007; Root & Hoefer, 1979; Savery & Wooden, 1994). That is, they have measured work experience in terms of years in an organisation. Some of these studies found a positive relationship between organisational tenure and safety (Savery & Wooden, 1994; Hansen, 1989), while others found a negative relationship between organisational tenure and safety (Butani, 1988; Gyekye & Salminen, 2010; Root & Hoefer, 1979). What is more, some studies have found no relationship between organisational tenure and safety (e.g., Iverson & Erwin, 1997; Paul and Maiti, 2007).

An additional way in which current experience is measured in the safety literature is in terms of current job tenure (e.g., the number of months an employee has been in their current job with their current employer). Three noteworthy studies have examined the relationship between current job tenure and accident rates but once more the results are conflicting. Frone (1998) found a positive relationship between current job tenure and work injuries, while Leigh (1986) found increased current job tenure to reduce the likelihood of an accident. Finally, Keyserling (1983) found current job tenure and accident rates to actually follow the shape of an inverted U curve. That is, the least experienced individuals (one to three months' experience) and the most experienced individuals (12 months' experience and over) had considerably less workplace incidents and accidents than individuals with middle-level experience (three to 12 months' experience).

One alternative explanation for these mixed findings is that these studies may not have considered participants' previous work experience (i.e., the knowledge, skills and abilities they bring from previous jobs). For example, consider two different studies designed to investigate the relationship between current work experience (as measured by

organisational tenure) and safety. One study looks at a specific group of people and finds a positive relationship between current work experience (organisational tenure) and safety; concluding that participants who have more current work experience are less likely to involved in an accident in the workplace. On the other hand, a second study may look at a different group of people and find a negative relationship between current work experience (organisational tenure) and safety; concluding that participants who have less current work experience are less likely to be involved in an accident in the workplace. However, what if the first group of participants reported extremely high amounts of similarity between past and present experience and the second group reported very low amounts of similarity between past and present experience? It would not be unreasonable to assume that similarity between past and present experience might be influencing the positive and negative relationship with safety. As such, the results of this dissertation are not only important for researchers examining the relationship between previous work experience and safety but also for researchers examining the relationship between current work experience and safety. That is, studies designed to investigate the relationship between current work experience and safety might need to measure their sample on the dimension of similarity between past and present experience in order to truly understand the relationship between current work experience and safety.

A final avenue for future research concerns the relationship between work experience and performance. Organisations also employ on the account of work experience because they expect better performance from experienced workers (Rynes, Orlitzky, & Bretz, 1997). This assumption is based on the idea that similar past experience results in important knowledge, skills and abilities that can be translated to the current work setting (Avolio, Waldman, & McDaniel, 1990; Hunter and Hunter, 1984; McDaniel et al., 1988a). In fact, there is a small body of research which has shown that organisations are prepared to pay more for within-

occupation or within-industry experience (Ang, Slaughter, & Yee Ng, 2002; Parent, 2000). However, similar to the literature on experience and safety, the literature on experience and performance is mixed (Avolio et al., 1990; Dokko, Wilk, & Rothbard, 2009; Hunter and Hunter, 1984; Hunter & Thatcher, 2007; McDaniel et al., 1988a; McDaniel, Schmidt & Hunter, 1988b; Mosel, 1952). Once again, there appears to be a clear lack of consistency in the performance literature regarding the definition and measurement of the work experience construct. As such, future research would benefit from assessing the relationship between similarity of past and present experience and performance.

Strengths

The present dissertation had a number of strengths which are worth noting. The first strength is that despite a small sample size (N = 58), the effects in the data were still significant and an analysis of the hypotheses was possible. Having achieved significant results with such a small sample size reinforces both the robustness of the results as well as the practical implications of these findings. The compelling finding that similarity between past and present experience is an important factor for safety suggests that it would be both worthwhile and beneficial for organisations to take into consideration a job applicant's degree of similarity between past and present experience during the hiring process. What is more, the dissertation also offers two measures of work experience (i.e., measuring work experience by identifying the number of organisations and the number of work groups or teams the target job has been performed in) which (a) appear to be good predictors of similarity between past and present experience and (b) can be easily included as questions in the work history section of an application blank or a structured interview.

The second strength of the dissertation is that although the variables of interest were measured using a self-report questionnaire, all the measures were biographical measures or objective measures of past experience (e.g., 'In total how many different jobs have you had'

and ‘how similar is the work environment of the job your are currently doing compared to work environments you have worked in in the past?’).

Summary and Conclusions

In summary this dissertation adds to the work experience literature in a number of ways. It shows that similarity between past and present experience facilitates safety. Furthermore, it is also highlights that measuring a job applicant’s work experience using time and amount based measures of work experience (i.e., cumulative job tenure, total number of jobs, and total number of organisations) are unlikely to be good predictors of similarity between past and present experience and thus involvement in an accident. In contrast, measuring work experience using more detailed and specific measures of work experience (i.e., measures which identify the number of organisations and/or work groups or teams the target job has been performed in) are likely to be good predictors of similarity between past and present experience and thus involvement in an accident.

The results from this dissertation support previous findings that there are various facets to work experience and that various measures of work experience capture different aspects of relevant experience (Quińones et al., 1995; Tesluk & Jacobs, 1998). It is not enough for organisations and researchers alike to use an individual’s cumulative employment history to assess their work experience. More detailed and specific experience related questions are necessary in order to develop a more complete profile of an individual’s experience. A more complete profile of an employer’s experience should allow organisations to make a more accurate assessment of their likely involvement in an accident, as well as provide an employer with a more accurate estimate of how long it will take the individual, if hired, to reach a satisfactory level of experience (i.e., correct gauge of the level of training and guidance needed in order to make sure the new employee remains safe (Burt, 2015).

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Appendix A

Advertisement Placed Around Organisations to Recruit Participants

WANTED EMPLOYEES WORKING IN HAZARDOUS JOBS

A research study being conducted at the University of Canterbury is seeking participants who:

- **Work in a job which has a safety component**
- **Who are ideally in the first 3 months of their tenure in this job**
- **However, any employee who works in a job that has a safety component is welcome to participate**
- **Who are willing to contribute 30 minutes of their time to help improve workplace safety***

Safety Study

This study asks questions about you, your job, and your behaviours at work.

What does participation entail: Complete a 20 to 30 minute on-line survey. Participation is voluntary, confidential and anonymous. The research has received University of Canterbury ethics approval. Participating employees have the option to go into a draw to win a 55" TV which the winning participant can collect from any Dick Smith Store throughout New Zealand.

How to participate: Click the link below or scan the QR code to go to the survey. Have a smartphone but not a QR Code reader? Search 'QR Code reader' in your mobile devices app store now! No purchase necessary. Internet access required.

http://canterbury.qualtrics.com/SE/?SID=SV_9t1TvuyJhqwXeD3

If you would like to discuss the research further please email Rachel Shackleton at rms138@uclive.ac.nz

A summary of the results can be obtained in February 2016 by contacting Rachel Shackleton.

*Participants have the option to go into a draw to win a 55" TV. The survey will close on the 30th September after which the winner will be contacted.

Appendix B

Advertisement for Safety Association Websites

WANTED EMPLOYEES WORKING IN HAZARDOUS JOBS

A research study being conducted at the University of Canterbury is seeking participants who:

- **Work in a job which has a safety component**
- **Who are ideally in the first 3 months of their tenure in this job**
- **Who are willing to contribute 30 minutes of their time to help improve workplace safety***

To participate please click on the link under the "NEWS" tab.

*Participants have the option to go into a draw to win a 55" TV. The survey will close on the 30th September after which the winner will be contacted.

Appendix C

Front Page of Online Workplace Safety Questionnaire

Workplace Safety
Information and Consent Sheet for Survey Participants

My name is Rachel Shackleton (a Master's thesis student) and I am conducting research on workplace safety under the supervision of Associate Professor Chris Burt at the University of Canterbury.

Participation in this project involves completing the following survey. This should take approximately 20 to 30 minutes.

Please note:
Completing the survey implies consent.

Project results should be available later in the year. You may receive a copy of the project results by contacting the researcher by email (rms138@uclive.ac.nz).

Participation is voluntary, confidential, and anonymous. No individual, team, or organization will be identified. Only the researchers will have access to individual responses. As such it will be impossible to withdraw your survey from the study once it has been completed.

The results of the project may be published, but you may be assured of the complete confidentiality of the data gathered in this investigation: your identity cannot be made public. The data will be securely stored and destroyed after ten years.

This project has been reviewed and approved by the University of Canterbury Human Ethics Committee, and participants should address any complaints to The Chair, Human Ethics Committee, University of Canterbury, Private Bag 4800, Christchurch (human-ethics@canterbury.ac.nz).

Appendix D

Front Page of Paper Workplace Safety Questionnaire

Workplace Safety

Information and Consent Sheet for Survey Participants

My name is Rachel Shackleton (a Master's thesis student) and I am conducting research on workplace safety under the supervision of Associate Professor Chris Burt at the University of Canterbury.

Participation in this project involves completing the survey enclosed with this letter. This should take approximately 20 to 30 minutes.

Please note:

Completing the surveys implies consent. DO NOT write your name on the survey or on the return envelope.

Project results should be available later in the year. You may receive a copy of the project results by contacting the researcher by email (rms138@uclive.ac.nz).

Participation is voluntary, confidential, and anonymous. No individual or team will be identified. Only the researchers will have access to individual responses. As such it will be impossible to withdraw your survey from the study once it has been returned. Once completed place the survey in the envelope and seal it.

If you wish to enter the draw to win a brand new 55" TV complete the entry form and seal it in the small envelope.

The results of the project may be published, but you may be assured of the complete confidentiality of the data gathered in this investigation: your identity can not be made public. The data will be securely stored and destroyed after ten years.

This project has been reviewed and approved by the University of Canterbury Human Ethics Committee, and participants should address any complaints to The Chair, Human Ethics Committee, University of Canterbury, Private Bag 4800, Christchurch (human-ethics@canterbury.ac.nz).

Appendix E

Instruction Sheet of Workplace Safety Questionnaire

Workplace Safety

Instructions

This survey asks questions about you, your job, and your behaviours at work.

How to complete the survey

- Read each question carefully then answer giving your *first reaction.*
- Please *answer all of the questions*.
- The usefulness of this survey depends upon the frankness and honesty with which you answer the questions.

Appendix F

Instruction Sheet of Paper Workplace Safety Questionnaire

Workplace Safety

Instructions

This survey asks questions about you, your job, and your behaviours at work.

How to complete the survey

- Read each question carefully, then answer giving your *first reaction.*
- Please *answer all of the questions*.
- The usefulness of this survey depends upon the frankness and honesty with which you answer the questions.
- Once completed, place the survey in the envelope provided, and seal it.

Appendix G

Questions in Workplace Safety Questionnaire

Your age is: _____

You are: Male □ Female □

Which **job applicant** category **best describes you** when you applied for your current job (please tick one):

□ **School or University leaver**: little or no workplace experience.

□ **Career transition**: previous workplace experience, but in a different industry and job type.

□ **Occupational focused**: previous experience in the same job, but in a different industry.

□ **Career focused***:* previous experience in the same job and industry, but for a different organisation/s.

□ **Other**, please specify…….

Does your employment contract include a 90 day trial period?

Yes □ No □

How long have you worked in your current job for? _____ years _____ months

How many co-workers (people you work with each day) do you have?_____

In total how many different jobs have you had?_____

In total how long have you worked for? _____ years _____ months

How many different organisations have you worked for? _____

For each of the three **accident and incidents categories** please indicate how many you have been involved with **<u>in your current job</u>. If none enter zero.**

Near miss incidents, which had it turned out differently, could have resulted in injury or damage ……

M**inor injuries** requiring medical attention (e.g. first aid treatment or a visit to a doctor)…….

Lost Time Injury (LTI) that has required you to take time off work……

This section is about your previous work experience.

Thinking about your current job*:*

How many different organisations have you undertaken this job in? (Counting your present job)……

How many different work groups or teams have you performed this job with? (Counting your present job).....

How many different work environments have you undertaken this job in? (For example, have you performed this job in different terrains, climates, countries?) (Counting your present job) ……

How many months of job related education have you received?.....

How many training programs relevant to this job have you attended?.....

How many on-the-job-mentors have you worked with to develop your skills and knowledge for this job?.....

How similar is the work environment of the job you are currently doing compared to work environments you have worked in in the past? (Circle a number on the scale)

1…….2…….3…….4…….5…….6…….7…….8…….9…….10

Never worked in this type of environment — Extremely similar

How similar are the work tasks of the job you are currently doing compared to work tasks you have performed in the past? (Circle a number on the scale)

1…….2…….3…….4…….5…….6…….7…….8…….9…….10

Never performed similar work tasks — Extremely similar

The following statements are about **your attitude towards your job**. Please indicate how much you agree or disagree with each of the statements.

	Strongly Disagree	Disagree	Neither Agree/ Disagree	Agree	Strongly Agree
I work with great enthusiasm	**1**	**2**	**3**	**4**	**5**
I am enthusiastic about making this job into a career	**1**	**2**	**3**	**4**	**5**
I am enthusiastic about getting involved in work tasks	**1**	**2**	**3**	**4**	**5**

Listed below are words and phrases **which could describe your job**. For each item please circle the number which indicates the extent to which you disagree or agree that this is true for your job.

	Strongly Disagree	Disagree	Neither Agree/ Disagree	Agree	Strongly Agree
Dangerous	**1**	**2**	**3**	**4**	**5**
Safe	**1**	**2**	**3**	**4**	**5**
Hazardous	**1**	**2**	**3**	**4**	**5**
Risky	**1**	**2**	**3**	**4**	**5**
Unhealthy	**1**	**2**	**3**	**4**	**5**
Could get hurt easily	**1**	**2**	**3**	**4**	**5**
Unsafe	**1**	**2**	**3**	**4**	**5**
Fear for health	**1**	**2**	**3**	**4**	**5**
Chance of death	**1**	**2**	**3**	**4**	**5**
Scary	**1**	**2**	**3**	**4**	**5**

Jobs vary in terms of the amount of interaction that is required with other team members or co-workers. The following statements are about how much **job related interaction you have with your team members or co-workers**. Please indicate how much you agree or disagree with each of the statements.

	Strongly Disagree	Disagree	Neither Agree/ Disagree	Agree	Strongly Agree
I work closely with my team/co-workers in doing my work	**1**	**2**	**3**	**4**	**5**
I frequently have to coordinate my efforts with my team/co-workers	**1**	**2**	**3**	**4**	**5**
My own performance is dependent on receiving accurate information from my team/co-workers	**1**	**2**	**3**	**4**	**5**
The way I perform my job has a significant impact on my team/co-workers	**1**	**2**	**3**	**4**	**5**
My job requires me to consult with my team/co-workers fairly frequently	**1**	**2**	**3**	**4**	**5**

The following statements are about **your job security**. Please indicate how much you agree or disagree with each of the statements.

	Strongly Disagree	Disagree	Neither Agree/ Disagree	Agree	Strongly Agree
I do everything I can to ensure that I keep this job	**1**	**2**	**3**	**4**	**5**
I help around the workplace to increase my job security	**1**	**2**	**3**	**4**	**5**
Doing things beyond what is normally expected of me positively influences my job security	**1**	**2**	**3**	**4**	**5**
I am certain I can keep this job.	**1**	**2**	**3**	**4**	**5**

The following statements are about **how you would like your team members or co-workers to feel about your work**. Please indicate how much you agree or disagree with each of the statements.

	Strongly Disagree	Disagree	Neither Agree/ Disagree	Agree	Strongly Agree
I need my co-workers to respect me for my work abilities	**1**	**2**	**3**	**4**	**5**
I need my co-workers to respect me for my commitment to my job	**1**	**2**	**3**	**4**	**5**
I need my co-workers to respect me for my commitment to working for this organisation	**1**	**2**	**3**	**4**	**5**
I need my co-workers to respect me for the achievements I attain during work	**1**	**2**	**3**	**4**	**5**
I need my co-workers to respect me for my ways of cooperation at work	**1**	**2**	**3**	**4**	**5**

The following statements are about **how you behave at work**. Please indicate how much you agree or disagree with each of the statements.

At work I …	Strongly Disagree	Disagree	Neither Agree/ Disagree	Agree	Strongly Agree
Take on extra responsibilities in order to help co-workers when things get demanding	**1**	**2**	**3**	**4**	**5**
Help co-workers with difficult assignments, even when assistance is not directly requested	**1**	**2**	**3**	**4**	**5**
Assist co-workers with heavy work-loads even though it is not part of my job	**1**	**2**	**3**	**4**	**5**
Help co-workers who are running behind in their work activities	**1**	**2**	**3**	**4**	**5**
Help co-workers with work when they have been absent	**1**	**2**	**3**	**4**	**5**
Go out of my way to help co-workers with work-related problems	**1**	**2**	**3**	**4**	**5**

The following statements are about **helping others in the workplace**. Thinking ONLY about your current job - Please respond by circling a number on the **frequency scale** beside each statement.

	Never	Hardly Ever	Sometimes	Quite Often	Frequently	Nearly all the Time
At work I have done something to help another employee which they were not expecting	**0**	**1**	**2**	**3**	**4**	**5**
At work I have done something to help another employee which I did not immediately tell them about	**0**	**1**	**2**	**3**	**4**	**5**
At work I have had to rush to complete my tasks because of spending time helping another employee	**0**	**1**	**2**	**3**	**4**	**5**
At work I have forgotten to do something because of spending time helping another employee	**0**	**1**	**2**	**3**	**4**	**5**
At work I have attempted to help another employee and realised I didn't have the required knowledge, skills or abilities	**0**	**1**	**2**	**3**	**4**	**5**
While helping another employee something unexpected has happened with my job	**0**	**1**	**2**	**3**	**4**	**5**
I ask if it is ok before helping another employee	**0**	**1**	**2**	**3**	**4**	**5**
Doing what I thought would be helpful for another employee turned out to be a safety risk	**0**	**1**	**2**	**3**	**4**	**5**

The following statements are about **how you behave at work**. Please indicate how much you agree or disagree with each of the statements.

At work ….	Strongly Disagree	Disagree	Neither Agree/ Disagree	Agree	Strongly Agree
I usually act on the spur of the moment	**1**	**2**	**3**	**4**	**5**
My interests shift quickly from one thing to another	**1**	**2**	**3**	**4**	**5**
I enjoy planning work carefully before carrying it out	**1**	**2**	**3**	**4**	**5**
I rarely think things out in detail before I act	**1**	**2**	**3**	**4**	**5**
I am impulsive about most things	**1**	**2**	**3**	**4**	**5**

The following statements are about **information seeking in the workplace**. Thinking ONLY about your current job - Please indicate how much you agree or disagree with each of the statements.

To obtain information ….	Strongly Disagree	Disagree	Neither Agree/ Disagree	Agree	Strongly Agree
I find someone else besides my co-workers to serve as a sounding board for a topic	**1**	**2**	**3**	**4**	**5**
I ask people who are acquainted with my supervisor's feelings on a subject rather than ask my supervisor	**1**	**2**	**3**	**4**	**5**
I ask people who are acquainted with my co-workers' feelings on a subject rather than ask my co-workers	**1**	**2**	**3**	**4**	**5**
I check with someone else before speaking to my supervisor	**1**	**2**	**3**	**4**	**5**
I check with someone else before speaking to my co-workers	**1**	**2**	**3**	**4**	**5**

The following statements are about **communication in the workplace**. Thinking ONLY about your current job - Please indicate how much you agree or disagree with each of the statements.

	Strongly Disagree	Disagree	Neither Agree/ Disagree	Agree	Strongly Agree
I make suggestions about how safety could be improved	**1**	**2**	**3**	**4**	**5**
I tell colleagues who were doing something unsafe to stop	**1**	**2**	**3**	**4**	**5**
I discuss new ways to improve safety with my colleagues or boss	**1**	**2**	**3**	**4**	**5**
I inform the boss when I notice a potential hazard	**1**	**2**	**3**	**4**	**5**
I report to my boss if my colleagues break any safety rules	**1**	**2**	**3**	**4**	**5**
My co-workers are ready to talk to fellow employees who failed to use safety equipment/procedures	**1**	**2**	**3**	**4**	**5**
My co-workers are prepared to stop others from working dangerously	**1**	**2**	**3**	**4**	**5**
My colleagues encourage each other to work safely	**1**	**2**	**3**	**4**	**5**
The company takes the safety ideas of employees seriously	**1**	**2**	**3**	**4**	**5**
The company is quick to respond to the safety concerns of their employees	**1**	**2**	**3**	**4**	**5**
The company encourages employees to voice their concerns about safety	**1**	**2**	**3**	**4**	**5**

The following statements are about **information seeking in the workplace**. Thinking ONLY about your current job - Please indicate how much you agree or disagree with each of the statements.

To obtain information ….	Strongly Disagree	Disagree	Neither Agree/ Disagree	Agree	Strongly Agree
I 'mess up' on something related to a topic to see how my supervisor responds	**1**	**2**	**3**	**4**	**5**
I 'mess up' on something related to a topic to see how my co-workers respond	**1**	**2**	**3**	**4**	**5**
I ignore rules or guidelines related to a topic to see how my supervisor reacts	**1**	**2**	**3**	**4**	**5**
I ignore rules or guidelines related to a topic to see how my co-workers react	**1**	**2**	**3**	**4**	**5**
I try my supervisor's patience on a topic, 'just a little bit,' to see how he or she responds	**1**	**2**	**3**	**4**	**5**
I try my co-workers' patience on a topic, 'just a little bit,' to see how they respond	**1**	**2**	**3**	**4**	**5**
I do one or two things to get on my supervisor's nerves in order to see how he or she reacts	**1**	**2**	**3**	**4**	**5**
I do one or two things to get on my co-workers' nerves in order to see how they react	**1**	**2**	**3**	**4**	**5**
I look for 'answers' in the behaviours of others	**1**	**2**	**3**	**4**	**5**
I pay close attention to how my supervisor acts towards me and try to relate these actions to my job	**1**	**2**	**3**	**4**	**5**
I pay close attention to how my co-workers act towards me and try to relate these actions to my job	**1**	**2**	**3**	**4**	**5**
I consciously make mental notes about what my supervisor tells others	**1**	**2**	**3**	**4**	**5**
I consciously make mental notes about what my co-workers tell others	**1**	**2**	**3**	**4**	**5**
I walk around just to see 'what's up' and think about what it might mean in relation to my job	**1**	**2**	**3**	**4**	**5**

I go about my tasks, but if any new information comes my way, I pay attention to it	**1**	**2**	**3**	**4**	**5**
I find out information by keeping my ears open to what is going on around me	**1**	**2**	**3**	**4**	**5**

Sources of Help

When an employee starts a new job they receive help from various sources to adapt and familiarise with the job, the organization, and the work environment. Thinking about when you joined your current organisation, please rank the following sources of help that you received. Place a 1 next to the source that provided you with the **most help** to adapt and familiarise, and so on **until all sources are ranked**.

Source of Help:	**Rank**
Members of the Human Resources team	
A trainer provided by the organisation	
Your work supervisor	
A co-worker officially assigned to you as a mentor	
Your co-workers	
Other, please specify ……..	

The following statements are about **information seeking in the workplace**. Thinking ONLY about your current job - Please indicate how much you agree or disagree with each of the statements.

To obtain information ….	Strongly Disagree	Disagree	Neither Agree/ Disagree	Agree	Strongly Agree
I am thought of negatively for seeking information	**1**	**2**	**3**	**4**	**5**
I make myself and the person I approach uncomfortable when I seek information	**1**	**2**	**3**	**4**	**5**
I have little to lose in seeking information	**1**	**2**	**3**	**4**	**5**
I ask specific, straight to the point questions to get the information I want	**1**	**2**	**3**	**4**	**5**
I identify what I don't know and ask for the information	**1**	**2**	**3**	**4**	**5**
I go directly to my supervisor and ask for the information I need	**1**	**2**	**3**	**4**	**5**
I do not 'beat around the bush' in asking for information	**1**	**2**	**3**	**4**	**5**
I use non-verbal behaviour to hint to my supervisor that I would like to know more information	**1**	**2**	**3**	**4**	**5**
I use non-verbal behaviour to hint to my co-workers that I would like to know more information	**1**	**2**	**3**	**4**	**5**
I indicate my curiosity about a topic without directly asking for the information	**1**	**2**	**3**	**4**	**5**
I let my supervisor know indirectly when I want to know information	**1**	**2**	**3**	**4**	**5**
I let my co-workers know indirectly when I want to know information	**1**	**2**	**3**	**4**	**5**
I ask questions in a way that they do not seem like questions	**1**	**2**	**3**	**4**	**5**
I find sources other than my supervisor to tell me information	**1**	**2**	**3**	**4**	**5**

I find sources other than my co-workers to tell me information	**1**	**2**	**3**	**4**	**5**
I find someone else besides my supervisor to serve as a sounding board for a topic	**1**	**2**	**3**	**4**	**5**

Sources of Help

When an individual starts a new job they require help to adapt and familiarise to the job, the organisation, and the work environment. This help could be provided by different sources within the organisation. Please indicate YOUR preference for who you would like to help you adapt and familiarise when you start a new job by ranking the following sources. Give your MOST preferred source a rank of 1, and so on until all sources are ranked.

Source of Help:	**Rank**
Members of the Human Resources team	
A trainer provided by the organisation	
Your work supervisor	
A co-worker officially assigned to you as a mentor	
Your co-workers	

The following statements are about **what you knew about your job when you started compared to what you now know**. Please indicate how much you agree or disagree with each of the statements.

	Strongly Disagree	Disagree	Neither Agree/ Disagree	Agree	Strongly Agree
My understanding of my job's safety risks has increased since I started	**1**	**2**	**3**	**4**	**5**
My understanding of my job's safety hazards has increased since I started	**1**	**2**	**3**	**4**	**5**
My general understanding of workplace safety in this organisation is more realistic now than when I first started this job	**1**	**2**	**3**	**4**	**5**

Being Helped

The following statements are about **your reactions to being helped by others**. Please read the description and indicate your agreement or disagreement with each reaction by circling a number on the scale.

If a co-worker helped you learn a work task you would …..

Reaction ..	Strongly Disagree	Disagree	Neither Agree/ Disagree	Agree	Strongly Agree
…feel gratitude	**1**	**2**	**3**	**4**	**5**
…express your gratitude	**1**	**2**	**3**	**4**	**5**
…feel indebted	**1**	**2**	**3**	**4**	**5**
…. be motivated to help other co-workers	**1**	**2**	**3**	**4**	**5**
…compliment them on their helpfulness	**1**	**2**	**3**	**4**	**5**
…tell others how helpful they were	**1**	**2**	**3**	**4**	**5**
… help them if you had a chance to	**1**	**2**	**3**	**4**	**5**
… try to find a way to help them	**1**	**2**	**3**	**4**	**5**

Being Helped

The following statements are about **your reactions to being helped by others**. Please read the description and indicate your agreement or disagreement with each reaction by circling a number on the scale.

If your supervisor helped you learn a work task you would …..

Reaction…	Strongly Disagree	Disagree	Neither Agree/ Disagree	Agree	Strongly Agree
…feel gratitude	**1**	**2**	**3**	**4**	**5**
…express your gratitude	**1**	**2**	**3**	**4**	**5**
…feel indebted	**1**	**2**	**3**	**4**	**5**
…. be motivated to help other co-workers	**1**	**2**	**3**	**4**	**5**
…compliment them on their helpfulness	**1**	**2**	**3**	**4**	**5**
…tell others how helpful they were	**1**	**2**	**3**	**4**	**5**
… help them if you had a chance to	**1**	**2**	**3**	**4**	**5**
… try to find a way to help them	**1**	**2**	**3**	**4**	**5**

Being Helped

The following statements are about **your reactions to being helped by others**. Please read the description and indicate your agreement or disagreement with each reaction by circling a number on the scale.

If a co-worker officially assigned to be your mentor helped you learn a work task you would…..

Reaction	Strongly Disagree	Disagree	Neither Agree/ Disagree	Agree	Strongly Agree
…feel gratitude	**1**	**2**	**3**	**4**	**5**
…express your gratitude	**1**	**2**	**3**	**4**	**5**
…feel indebted	**1**	**2**	**3**	**4**	**5**
…. be motivated to help other co-workers	**1**	**2**	**3**	**4**	**5**
…compliment them on their helpfulness	**1**	**2**	**3**	**4**	**5**
…tell others how helpful they were	**1**	**2**	**3**	**4**	**5**
… help them if you had a chance to	**1**	**2**	**3**	**4**	**5**
… try to find a way to help them	**1**	**2**	**3**	**4**	**5**

Being Helped

The following statements are about **your reactions to being helped by others**. Please read the description and indicate your agreement or disagreement with each reaction by circling a number on the scale.

If a trainer contracted by your organisation helped you learn a work task you would …..

Reaction…	Strongly Disagree	Disagree	Neither Agree/ Disagree	Agree	Strongly Agree
…feel gratitude	**1**	**2**	**3**	**4**	**5**
…express your gratitude	**1**	**2**	**3**	**4**	**5**
…feel indebted	**1**	**2**	**3**	**4**	**5**
…. be motivated to help other co-workers	**1**	**2**	**3**	**4**	**5**
…compliment them on their helpfulness	**1**	**2**	**3**	**4**	**5**
…tell others how helpful they were	**1**	**2**	**3**	**4**	**5**
… help them if you had a chance to	**1**	**2**	**3**	**4**	**5**
… try to find a way to help them	**1**	**2**	**3**	**4**	**5**

Appendix H

Prize Draw Form

Thank you for taking the time to complete this survey

As a thank you we are offering you the opportunity to enter a draw to win a 55” TV

Do you want to be entered in the draw to win a brand new 55” TV? The information you provide to enter the draw is not linked to your responses and will remain confidential. The study will close on the 30th September 2015 after which the winner will be contacted (TV must be picked up from any Dick Smith location throughout New Zealand). **Please note employees from other organisations are also participating in this study.**

Yes □ No □

Please answer the following questions so that you can be included in the draw to win a 55”TV.

First Name: ……

Last Name: ……

Email: …….

Place this sheet in the small envelope provided, seal and return.